

**(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)**

**(19) World Intellectual Property  
Organization  
International Bureau**



**(43) International Publication Date**  
**21 October 2004 (21.10.2004)**

**PCT**

**(10) International Publication Number**  
**WO 2004/090568 A1**

**(51) International Patent Classification<sup>7</sup>: G01S 17/36**

**(21) International Application Number:**  
PCT/NZ2004/000070

**(22) International Filing Date:** 6 April 2004 (06.04.2004)

**(25) Filing Language:** English

(26) **Publication Language:** English

**(30) Priority Data:**  
525241                      8 April 2003 (08.04.2003)      NZ

**(71) Applicant (for all designated States except US): THE UNIVERSITY OF WAIKATO [NZ/NZ]; Gate 5, Hillcrest Road (no number), Hamilton, 2001 (NZ).**

**(72) Inventor; and**

(75) **Inventor/Applicant (for US only):** **DORRINGTON, Adrian, Andrew** [NZ/NZ]; 48c Paterson Street, Dinsdale, Hamilton, 2001 (NZ).

(74) Agents: MURPHY, Simon, J et al.; Private Bag 3140, Level 12, KPMG Centre, 85 Alexandra Street, Hamilton, 2001 (NZ).

**(81) Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

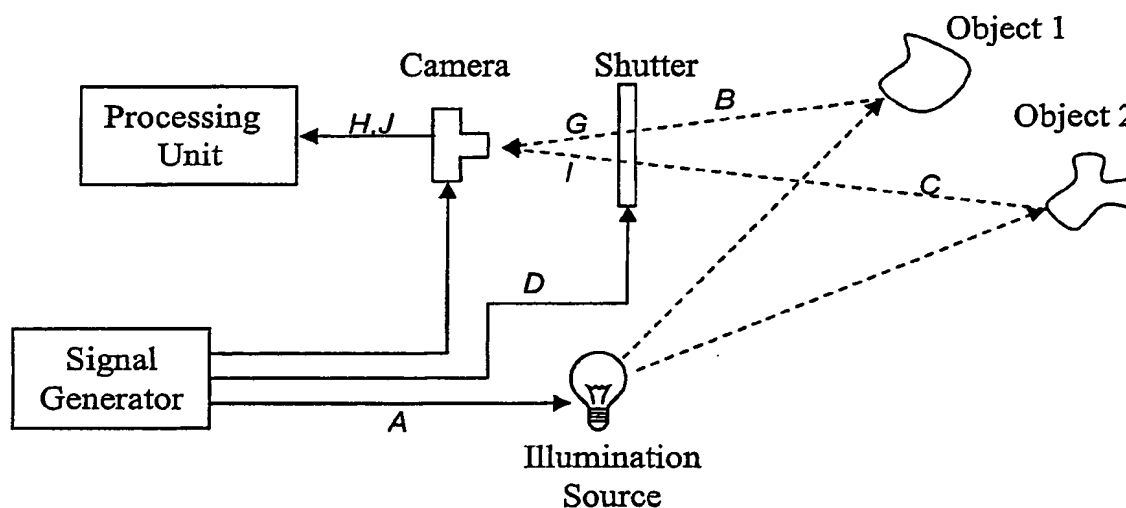
**(84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(54) Title:** RANGE SENSING SYSTEM



**(57) Abstract:** The invention relates to a range sensing system. An energy source is adapted to emit energy which is capable of reflection by a target. The energy source is activated and deactivated in a cyclic pattern with a selected source frequency. A receiver is adapted to sense the reflection of emitted energy from the target. The receiver includes a shielding system to block the sensing of reflected energy from the target in a cyclic pattern with a selected receiver frequency. The output signal of the receiver is compared with a reference signal whereby the phase differences between the receiver signal and reference signal is used to determine a range value.

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